Applicant : Fatiha Anouar et al.
Serial No. : 10/519,032
Filed : August 9, 2005
Page : 2 of 9

Attorney's Docket No.: 08774-269US1

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Currently amended) ~~A method as claimed in claim 1~~ A method of testing a currency item comprising deriving a plurality of measurements of the currency item at a resolution (R) and processing the measurements to derive values at a different resolution, wherein the resolution is reduced in the spectral domain, the method comprising filtering ~~the~~ a signal of the measured values in the spectral domain to reduce the resolution in the spectral domain by taking a subset of the set of spectral components.

3. (Original) A method as claimed in claim 2 wherein the subset is of a predetermined size.

4. (Previously Presented) A method as claimed in claim 2 wherein the spectral domain is the frequency spectrum.

5. (Original) A method as claimed in claim 4 wherein the filtering excludes high frequency components.

6. (Previously Presented) A method as claimed in claim 2 wherein the signal of the measured values is normalized, preferably by a mean value, before filtering.

7. (Previously Presented) A method as claimed in claim 2 comprising deriving a feature vector using the subset of spectral components.

8.   (Original) A method as claimed in claim 7 comprising processing the feature vector using a neural network, including a backpropagation network or an LVQ network.

9.   (Currently amended) A method as claimed in claim [[1]] 2 comprising interpolation to increase the resolution in the spatial domain.

10.   (Original) A method as claimed in claim 9 wherein measurements are derived at a first resolution R1 in a first spatial direction and at a second resolution R2 in a second spatial direction.

11.   (Original) A method as claimed in claim 10 wherein the first and second directions are substantially perpendicular

12.   (Previously Presented) A method as claimed in claim 10 wherein R1<R2, and wherein the processing increases the resolution in the first direction to approximately R2.

13.   (Currently amended) A method as claimed in claim [[1]] 2 involving a method of reconstituting a sampled signal.

14.   (Currently amended) A method as claimed in claim [[1]] 2 involving summing measured values weighted by a weighting function.

15.   (Original) A method as claimed in claim 14 wherein the weighting function is of the form $\sin(x)/x$.

16.   (Currently amended) A method as claimed in claim [[1]] 2 including using a weighting window to compensate for edge effects.

Applicant : Fatiha Anouar et al.
Serial No. : 10/519,032
Filed : August 9, 2005
Page : 4 of 9

Attorney's Docket No.: 08774-269US1

17. (Original) A method as claimed in claim 16 wherein the weighting window is a raised cosine window such as a Hamming or Hanning or Kaiser-Bessel window.

18. (Previously Presented) A method as claimed in claim 9 comprising removing the mean of the measured values before interpolation and reinstating it after interpolation.

19. (Currently amended) A method as claimed in claim [[1]] 2 wherein the measured values are derived along a line substantially parallel to one edge of the document.

20. (Currently amended) A method as claimed in claim [[1]] 2 for validating a currency item.

21. (Currently amended) A method as claimed in claim [[1]] 2 for denominating a currency item.

22. (Currently amended) A method as claimed in claim [[1]] 2 for testing a document, banknote or other value sheet.

23. (Currently amended) A method as claimed in claim [[1]] 2 for testing a coin.

24. (Currently amended) A currency tester adapted to perform a method as claimed in claim [[1]] 2.

25. (Original) A currency tester as claimed in claim 24 comprising means for sensing a currency item at resolution R.

Applicant : Fatiha Anouar et al.   Attorney's Docket No.: 08774-269US1
Serial No. : 10/519,032
Filed   : August 9, 2005
Page   : 5 of 9

26.   (Original) A currency tester as claimed in claim 25 comprising means for sensing a currency item at resolution R1 extending in a first direction and means for sensing a currency item at a resolution R2 in a second direction.

27.   (Original) A currency tester as claimed in claim 25 comprising a linear sensor array of resolution R1 and means for moving the currency item relative to the sensor array at a resolution R2.

28.   (Previously Presented) A currency tester as claimed in claim 24 for denominating and/or validating currency items.

29.   (Previously Presented) A currency tester as claimed in claim 24 for testing a coin.

30.   (Previously Presented) A currency tester as claimed in claim 24 for testing a document, banknote or other value sheet.

31.   (Original) A currency tester as claimed in claim 30 wherein a document can be fed in the transport path with skew and offset with respect to the edge of the transport path.

32.   (Previously Presented) A currency tester as claimed in claim 24 which can process a plurality of currency items of different sizes.

33.   (New) A currency tester adapted to perform a method as claimed in any one of claims 3 through 8.